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MACRONUTRIENTS LEAF CONTENTS OF CORN IN CONSORTIUM WITH FORAGE OF THE GENUS *PANICUM* AND *UROCHLOA*

TEORES DE MACRONUTRIENTES FOLIARES DO MILHO EM CONSÓRCIO COM FORRAGEIRAS DOS GÊNEROS PANICUM E UROCHLOA

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In recent years, the corn crop in Brazil has undergone major technological changes, aiming at a sustainable production. This improvement may be related to appropriate management, which includes, among other practices, crop rotation and tillage; that one can get through crop-livestock integration (CLI). The CLI can be done by the consortium sequence or crop rotation with annual forages in order to recover degraded pastures. This work aimed to evaluate the macronutrient leaf content of corn intercropped with forages of the genus *Panicum* and *Urochloa*. The experiment was conducted at the Farm for Teaching, Research and Extension, Faculty of Engineering - UNESP, Ilha Solteira in an Oxisol in Savannah conditions, being in no-tillage for 8 years (previous corn crop). In nitrogen fertilization was applying 100 kg ha^{-1} of N as urea. The experimental design was a randomized block with four replications and five treatments: *Panicum maximum* cv. Tanzania sown during the nitrogen fertilization (CTD) of the corn; *Panicum maximum* cv. Mombaça sown during the nitrogen fertilization (CMD) of the corn; *Urochloa brizantha* Xaraes sown during the occasion of nitrogen fertilization (CBD) of the corn; *Urochloa ruziziensis* sown during the nitrogen fertilization (CRD) of the corn, and corn without intercropping (CWI). The grasses seeds were mixed with fertilizer minutes before sowing and placed in fertilizer seeder compartment and the fertilizer were deposited in the soil at a depth of 0.03 m in the amount of 5 kg ha^{-1}. It was observed that there was no significant difference between the single corn tillage and the corn in intercropping with different modalities of forages of genus *Panicum* and *Urochloa* to foliar contents of N, P, K, Ca and Mg, demonstrating that the consortium did not influence the absorption of nutrients by corn. In respect to S, the consortium CTD, was higher only when compared at CWI, however, did not differ significantly from the others (Table 1). The absorption of nutrients by corn, are not affected when intercropped with forage *Urochloa* and *Panicum* genus, sown at the time of nitrogen fertilization of corn.

Table 1. Leaf contents of nitrogen (N), phosphorus (P), potassium (K), calcium (Ca), magnesium (Mg), sulfur (S) of corn intercropped with forages of the genus *Panicum* and *Urochloa*. Selviria-MS, 2009/2010

Treatments	Leaf contents (g kg^{-1} of DM)					
	N	P	K	Ca	Mg	S
CTD	31.82	7.12	20.87	3.12	1.82ab	1.82a
CMD	29.90	7.05	21.25	3.22	1.70b	1.62ab
CBD	29.90	6.95	21.12	3.10	1.87ab	1.70ab
CRD	30.82	7.35	20.75	3.17	1.90ab	1.60ab
CWI	28.27	7.32	21.37	3.32	2.02a	1.52b
C.V. (%)	13.59	7.47	4.85	13.31	6.28	6.41
P>F	>.0005	> .0005	>.0005	>.0005	<.0005	<.0005

In the column, means followed by different letters differ each other.

Keywords: integrated crop-livestock, nutritional status, *Zea mays*.
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